

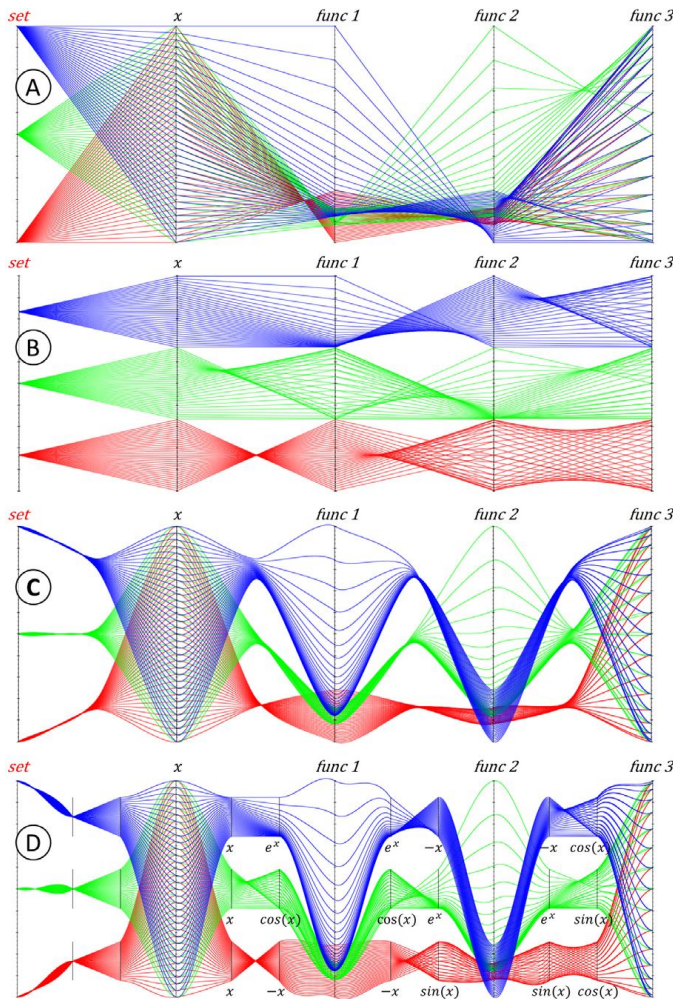
# Weekly report

## 1 Done

### 1.1 Reading

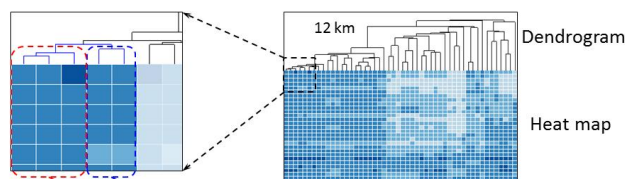
#### 1.1.1 Multi-Resolution Climate Ensemble Parameter Analysis with Nested Parallel Coordinates Plots (Junpeng Wang):

They proposed NPCP (nested parallel coordinates plots) and summarized the cons and pros of varied PCPs as shown as follow.



A: Superimposed PCP overlays all three sets in a single visualization. Users can compare the data range and data distribution easily.  
B: Juxtaposed PCPs separates the sets and visualize them in distinct PCPs. The relational patterns are obvious but hard to compare.  
C: PCP with Explicit Encoding employs techniques like edge bundling.  
D: NPCP combines the advantages of all those PCPs mentioned above. It nests multiple juxtaposed PCPs into the original superimposed PCP and employ curve bundling as explicit encoding. From my perspective, it attains the effective utilization of space.

Besides, their system involves another visualization layout which is strange to me. This layout combines a heat map and a dendrogram to provide an overview of one ensemble set. Users get a general knowledge of dissimilarities and similarities and check detail in the linked view.



### 1.1.2 Visualizing Social Media Content with SentenTree (Mengdie Hu):

Their work, including visual design and interactive design, is very simple. They proposed SentenTree to visualize frequent sequential patterns, a classical issue in data mining, from social media posts. However, they are the pioneers in this field so that their paper is received. Actually, there are other classical issues and effective algorithms in data mining already, combine them with visualization is a good point.



## 1.2 Discussion

Xia Jing and I discussed about how to improve the layout and function of Relationline.

## 1.3 Other

This week I went back to Tianjin to finish the interventional closure surgery.